REMARKS

This responds to the Office Action mailed on July 26, 2005. Claims 1 and 27 are amended, claims 11 and 31 are canceled, and no claims are added. As a result, claims 1-10, 27-30, and 32-35 are now pending in this Application.

Objection to the Specification

The Examiner objected to the specification due to informalities. It is believed that the amendment to the specification made herein addresses the concerns expressed in the Office Action and renders the objection moot.

Objection to the Drawings

The Office objects to FIG. 3 of the drawings because: (a) "the cross-hatchings of the drawings are not proper, for example, figure 3 fails to show the cross-hatched of a dielectric layer 332, a solder resist 328 ... etc."; and (b) it fails "to show a first contact point (element 353) connected to a capacitor terminal (element 306)."

With respect to adding cross-hatching to FIG. 3, it is respectfully noted that the only applicable cross-hatch symbols shown in the Manual of Patent Examining Procedure (M.P.E.P.) are those for metals, and perhaps for a "synthetic resin." See M.P.E.P. § 608.02. These are both shown as diagonal line cross-hatching. However, as FIG. 3 shows several layers of metals adjacent each other, the Applicant believes that additional cross-hatching would operate to needlessly obscure many of the finer details of the drawing. Further, the M.P.E.P. notes that "the following symbols should be used to indicate various materials where the material is an important feature of the invention." *Id.* The guidance given by the M.P.E.P. is "should" and not "must." Therefore, the use of such symbols is not required. In any case, the metal components shown are not necessarily any more or less important than any other feature of the illustrated embodiments. Therefore, since the dielectric layer 332 is already shown in cross-hatched form, the Applicant respectfully declines to increase the amount of cross-hatching used in FIG. 3 at this time.

With respect to the connection between the contact point 353 and the capacitor terminal 306, it is respectfully noted that the "first conductor 337 may be used to connect the first contact point 353 of the resistive element 300 to the terminal 306 of the capacitor 305 ... the terminals 306, 308 may be connected to the conductors 337, 339 using solder 326, 316, respectively." Application, pg. 5, line 30 – pg. 6, line 4. Thus, the first contact point 353 is indeed shown and described as connected to the capacitor terminal 306, using the first conductor 337 and solder 326. Therefore, the Applicant respectfully declines to amend FIG. 3 at this time, since the "structural detail that is essential for a proper understanding of the disclosed invention" is already shown in the drawing. M.P.E.P. § 608.02(d).

Objections to the Claims

The Examiner objected to claims 11 and 31 due to informalities. Since claims 11 and 31 have been canceled, the objection is now moot.

§103 Rejection of the Claims

Claims 1-7, 10, 11, 27 and 30-35 were rejected under 35 USC § 103(a) as being unpatentable over Nagasaka (U.S. 6,201,286; hereinafter "Nagasaka") in view of Novak et al. (U.S. 6,525,622; hereinafter "Novak"). First, the Applicant does not admit that Nagasaka or Novak are prior art, and reserves the right to swear behind these references in the future. Second, since a *prima facia* case of obviousness has not been established, the Applicant respectfully traverses this rejection.

The Examiner has the burden under 35 U.S.C. § 103 to establish a *prima facie* case of obviousness. *In re Fine*, 837 F.2d 1071, 1074, 5 U.S.P.Q.2d (BNA) 1596, 1598 (Fed. Cir. 1988). In combining prior art references to construct a *prima facie* case, the Examiner must show some objective teaching in the prior art or some knowledge generally available to one of ordinary skill in the art that would lead an individual to combine the relevant teaching of the references. *Id.* The M.P.E.P. contains explicit direction to the Examiner that agrees with the *In re Fine* court:

> In order for the Examiner to establish a *prima facie* case of obviousness, three base criteria must be met. First, there must be some suggestion or motivation,

> either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations. The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art, and not based on Appellant's disclosure. *M.P.E.P.* § 2142 (citing *In re Vaeck*, 947 F.2d 488, 20 U.S.P.Q.2d (BNA) 1438 (Fed. Cir. 1991)).

An invention can be obvious even though the suggestion to combine prior art teachings is not found in a specific reference. *In re Oetiker*, 977 F.2d 1443, 24 U.S.P.Q.2d (BNA) 1443 (Fed. Cir. 1992). However, while it is not necessary that the cited references or prior art specifically suggest making the combination, there must be some teaching somewhere which provides the suggestion or motivation to combine prior art teachings and applies that combination to solve the same or similar problem which the claimed invention addresses. One of ordinary skill in the art will be presumed to know of any such teaching. (See, e.g., *In re Nilssen*, 851 F.2d 1401, 1403, 7 U.S.P.Q.2d 1500, 1502 (Fed. Cir. 1988) and *In re Wood*, 599 F.2d 1032, 1037, 202 U.S.P.Q. 171, 174 (C.C.P.A. 1979)). The requirement of a suggestion or motivation to combine references in a *prima facie* case of obviousness is emphasized in the Federal Circuit opinion, *In re Sang Su Lee*, 277 F.3d 1338; 61 U.S.P.Q.2D 1430 (Fed. Cir. 2002), which notes that the motivation must be supported by evidence in the record.

No proper *prima facie* case of obviousness has been established because either: (1) combining the references does not teach all of the limitations set forth in the claims, (2) there is no motivation to combine the references, and (3) combining the references provides no reasonable expectation of success. Each of these points will be explained in detail, as follows.

Combining The References Do Not Teach All Limitations: With respect to independent claims 1 and 27, the Office admits that "Nagasaka does not specifically disclose the IC dhip or chip component, which being a capacitor having a terminal soldered to the first contact point." It is also the case that neither Nagasaka nor Novak teach "a summed series resistance provided by adding a value of resistance for the resistive element to an effective series resistance of the capacitor is approximately equal to an effective series resistance of a circuit board and the circuit board plane," as claimed by the Applicant.

While the Office asserts this concept is taught by Novak, the Applicant was unable to find any such teaching. In fact, Novak describes determining a mounted resistance for each one of a plurality of capacitors (Rm-req) as being equal to the number of capacitors times a target electrical impedance (Zt). Novack, Col. 4, lines 59-64. The impedance Zt, in turn, is depends on the resonant frequency of the capacitors. Novack, Col. 3, lines 45-49. Thus, Novack actually describes a mounted resistance that depends on the resonant frequency of the individual capacitors, and not on the series resistance of the capacitor, the effective series resistance of the circuit board, and the equivalent series resistance of connecting circuitry, such as a circuit board plane, claimed by the Applicant. Nagasaka does not describe any mechanism for selecting circuit element resistance whatsoever.

Thus, since neither Nagasaka nor Novak teach "a summed series resistance provided by adding a value of resistance for the resistive element to an effective series resistance of the capacitor is approximately equal to an effective series resistance of a circuit board and the circuit board plane," as claimed by the Applicant, no combination of these references can provide this missing element. Therefore, a *prima facie* case of obviousness has not been established with respect to independent claims 1 and 27. It is respectfully noted that if an independent claim is nonobvious under 35 USC § 103, then any claim depending therefrom is also nonobvious. See M.P.E.P. § 2143.03. Therefore all of the rejected dependent claims (i.e., claims 2-7, 10, 30, and 32-25) are also nonobvious.

No Reasonable Expectation of Success: Since neither Nagasaka nor Novak teach "a summed series resistance provided by adding a value of resistance for the resistive element to an effective series resistance of the capacitor is approximately equal to an effective series resistance of a circuit board and the circuit board plane," as claimed by the Applicant, one of skill in the art would not expect any success in combining the references. That is, employing the teachings of Novak with respect to determining a mounted capacitor resistance in the resistive element of Nagasaka would not result in the ability to match circuit board and interconnection resistance.

It is respectfully noted that references must be considered in their entirety, including parts that teach away from the claims. See MPEP § 2141.02. Since Novack teaches away from the matching mechanism employed by the Applicant, there is no motivation to combine the references.

The use of unsupported assertions in the Office Action does not satisfy the explicit requirements needed for demonstrating motivation as set forth by the *In re Sang Su Lee* court. Therefore, the Examiner appears to be using personal knowledge to make the assertions, and is respectfully requested to submit an affidavit as required by 37 C.F.R. § 1.104(d)(2).

In summary, since there is no evidence in the record to support disclosure by Nagasaka or Novack of a "summed series resistance provided by adding a value of resistance for the resistive element to an effective series resistance of the capacitor is approximately equal to an effective series resistance of a circuit board and the circuit board plane," as claimed by the Applicant; since there is no motivation to combine Nagasaka and Novak to supply the missing element; and since no reasonable expectation of success arises, a *prima facie* case of obviousness has not been established with respect to independent claims 1 and 27, nor with respect to all the claims that depend from them. It is therefore respectfully requested that the rejection of claims 1-7, 10, 27, 30, and 32-35 under 35 U.S.C. § 103 be reconsidered and withdrawn.

CONCLUSION

The Applicant respectfully submits that the claims are in condition for allowance and notification to that effect is earnestly requested. The Examiner is invited to telephone the Applicant's attorney, Mark Muller at (210) 308-5677, or Applicant's below-named representative to facilitate the prosecution of this Application. If necessary, please charge any additional fees or credit overpayment to Deposit Account No. 19-0743.

Respectfully submitted,

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CERTIFICATE UNDER 37 CFR 1.8: The undersigned hereby certifies that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail, in an envelope addressed to: MS Amendment, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450, on this 26th day of September 2005.

Anne M. Richards

Name

Signature